

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

Claims 1-5 (cancelled)

Claims 6 (currently amended): A substantially pure protein comprising ~~The substantially pure protein of claim 5 having~~ an amino acid sequence selected from the group consisting of SEQ ID NO: 3 or SEQ ID NO: 6 ~~the sequence shown in Fig. 1 (SEQ ID NO: 3, 24, 25 and 26) and the sequence shown in Fig. 2 (SEQ ID NO: 6, 27 and 28).~~

Claims 7 (currently amended): A substantially pure polypeptide having an amino acid sequence which is at least 80% identical to an amino acid sequence selected from the group consisting of SEQ ID NO: 3 or SEQ ID NO: 6 ~~the sequence shown in Fig. 1 (SEQ ID NO: 3, 24, 25 and 26) and the sequence shown in Fig. 2 (SEQ ID NO: 6, 27 and 28), wherein~~

- a) said polypeptide is activated by thrombin; and
- b) said polypeptide mediates phosphoinositide hydrolysis in a cell expressing said polypeptide on its surface.

Claim 8 (currently amended): A substantially pure polypeptide which is a fragment or analog of SEQ ID NO: 3 or SEQ ID NO: 6 ~~a protease-activated receptor 3~~ comprising a domain capable of activation by thrombin and mediating phosphoinositide hydrolysis.

Claims 9-12 (cancelled)

Claim 13 (withdrawn): A method of testing a candidate compound for its ability to act as an agonist of a protease-activated receptor 3 ligand, the method comprising:

- a) contacting a candidate compound with a cell which expresses on its surface a recombinant protease-activated receptor 3 protein or biologically active fragment or analog thereof;
- b) measuring PAR3-mediated response of the cell; and
- c) identifying the candidate compound as an agonist wherein the contacting causes a substantial increase in PAR3-mediated response.

Claim 14 (withdrawn): A method of testing a candidate compound for the ability to act as an antagonist of a protease-activated receptor 3 ligand, the method comprising:

- a) contacting in the presence of a protease-activated receptor agonist a candidate compound with a cell which expresses on its surface a recombinant protease-activated receptor 3 protein or biologically active fragment or analog thereof;
- b) measuring PAR3-mediated response of the cell; and
- c) identifying the candidate compound as an antagonist wherein the contacting causes a substantial decrease in PAR3-mediated response relative to PAR3-mediated response in the absence of the candidate antagonist.

Claim 15 (withdrawn): The method of claim 14, wherein the cell is a mammalian cell which normally present substantially no protease-activated receptor 3 on its surface, the PAR3-mediated response measured in intracellular phosphoinositide hydrolysis in the cell.

Claims 16-20 (cancelled)

Claim 21 (new): The substantially pure protein of claim 6, wherein the amino acid sequence is SEQ ID NO: 3.

Claim 22 (new): The substantially pure protein of claim 6, wherein the amino acid sequence is SEQ ID NO: 6.

Claim 23 (new): The substantially pure protein of claim 7, wherein the amino acid sequence is SEQ
ID NO: 3.

Claim 24 (new): The substantially pure protein of claim 7, wherein the amino acid sequence is SEQ
ID NO: 6.

Claim 25 (new): The substantially pure protein of claim 8, wherein the amino acid sequence is SEQ
ID NO: 3.

Claim 26 (new): The substantially pure protein of claim 8, wherein the amino acid sequence is SEQ
ID NO: 6.